Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:
Coastal Bend Texas Benthic Habitat - San Antonio Bay 2007 Geoform

1.2. Summary description of the data:
In 2006 and 2007 the NOAA Office for Coastal Management purchased services to process existing digital multi-spectral imagery (ADS-40) and create digital benthic habitat data from this imagery for selected Texas coastal bend bays. The Center worked cooperatively with Fugro EarthData, the Texas Parks and Wildlife Department (TPWD) and the Texas A and M University Center for Coastal Studies to develop benthic habitat data, primarily Submerged Aquatic Vegetation(SAV) for several coastal bays. This data will support the state's recently adopted Seagrass Monitoring Program which calls for regional mapping of SAV for status and trends assessment. The Center, Texas A and M, and TPWD have coordinated on the requirements of this project.

Original contact information:

Contact Org: NOAA Office for Coastal Management

Phone: 843-740-1202

Email: coastal.info@noaa.gov

1.3. Is this a one-time data collection, or an ongoing series of measurements?
One-time data collection

1.4. Actual or planned temporal coverage of the data:
2009-02-13

1.5. Actual or planned geographic coverage of the data:
W: -96.878809, E: -96.576873, N: 28.5268, S: 28.185683

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Map (digital)

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:
NOAA Office for Coastal Management (NOAA/OCM)

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:
NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:
coastal.info@noaa.gov

2.5. Phone number:
(843) 740-1202

3. Responsible Party for Data Management
Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

3.2. Title:
Data Steward

4. Resources
Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

5. Data Lineage and Quality
NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality,

objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible
(describe or provide URL of description):
Process Steps:
  - 2009-02-03 00:00:00 - The original 1m DOQQs for the project area were resampled to 2m and mosaicked into a single four-band image. Image segmentation was performed using Definiens Professional. The classification of the habitat segments(as ESRI polygon shapefiles) was performed using CART analysis. The habitat map was refined with the aid of field data collected during May and July of 2008. The final habitat shapefile clipped to the final project area boundary. Each polygon has a unique polygon identification number in the attribute table (field"POLY_ID"). The final shapefile was checked for proper topology and to insure that each polygon has a correct habitat label, habitat code, modifier label if present, unique identification number, and an area calculation. Polygons below the 100m2 minimum mapping unit (MMU) were eliminated, though some polygons less than 100m2 were retained if their area changed to below the MMU due to the polygon boundary smoothing process. The habitat data also went through a independent validation review. Accuracy assessment was performed on seven classes with Patchy SRV and Continuous SRV being combined into a single SRV accuracy class. For field data collection, non-random sites in the form of polygons were chosen by analysts with an attempt to sample all available image signatures. These sites were visited in the field and data on each site was collected directly into digital format (ESRI shapefile) using a laptop or onto a paper form that was later entered into digital format.Sites were navigated to primarily using a Garmin GPS 76unit connected to a Panasonic Toughbook laptop displaying the project imagery and polygons in ArcMap v9.1 or using the GPS unit alone. Habitat classification was estimated as accurately as possible using methods or combination of methods which included above water observation, snorkeling, wading, and underwater video.This data were entered into an ESRI shapefile via a digital field form in ArcMap specifically developed for this type of field data collection. More sample polygon sites were collected in-office based on the in-field collected sites in order to meet the 30 sites per class accuracy assessment requirement. For each class, a random selector macro in ArcMap was used to randomly select 30 sites for accuracy assessment. The entire pool of accuracy sites was kept separate from the remaining sites and only used for accuracy assessment during the project. Anonymity of the accuracy sites was maintained throughout the project because it was unnecessary to ever visually review these sites in order to perform the accuracy analysis. More accuracy assessment sites were collected in a later field collection to add to the analysis. These sites were chosen by randomly selecting polygons within specific regions that were pre-determined to be visited. Information for these sites was collected using the same methods for the other sites. Accuracy information was compiled using ArcMap.The zonal stats tool in ArcMap was used to determine the majority map class each accuracy polygon intersected with. An accuracy assessment error matrix

was generated using this information by importing it to Microsoft Excel and building the matrix. Both deterministic and fuzzy accuracy assessment were performed. The accuracy analysis and error matrices are presented and discussed in the Final Accuracy Assessment Report. (Citation: San Antonio Espiritu Santo Bay Digital Orthoimagery)

- 2015-01-01 00:00:00 - The data were converted from a single ESRI polygon shapefile classified according to the System for Classifying Habitats in Estuarine and Marine Environments (SCHEME) to the Coastal and Marine Ecological Classification Standard (CMECS) 2012 format (which can be found at https://coast.noaa.gov/digitalcoast/tools/cmecs-crosswalk) which produces separate geoform, geoform, and geoform feature layers from the original input benthic habitat dataset. This geoform feature layer contains CMECS geoform component attributes where an "Equal" or "Nearly Equal" SCHEME value was present in the original data. Polygons for which no geoform information was present have been removed. No other changes to the original polygon boundaries or any other alterations of the original SCHEME data were made during this process.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?
No

6.1.1. If metadata are non-existent or non-compliant, please explain:
Missing/invalid information:
- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.3. Data access methods or services offered
- 7.4. Approximate delay between data collection and dissemination

- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:
NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:
https://www.fisheries.noaa.gov/inport/item/47977

6.4. Process for producing and maintaining metadata
(describe or provide URL of description):
Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access
NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:
NOAA Office for Coastal Management (NOAA/OCM)

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:
ftp://ftp.coast.noaa.gov/pub/benthic/Benthic_Cover_Data/TX_SanAntonioBay.zip

7.3. Data access methods or services offered:

7.4. Approximate delay between data collection and dissemination:

      7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

    8.1. Actual or planned long-term data archive location:
(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

      8.1.1. If World Data Center or Other, specify:

      8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

    8.2. Data storage facility prior to being sent to an archive facility (if any):
      Office for Coastal Management - Charleston, SC

    8.3. Approximate delay between data collection and submission to an archive facility:

    8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?
Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.